

REMARKS

Claims 21-24, 27, 29, 31, 33, 35-36 and 69 will be pending in this application after entry of applicants' previously filed Amendment and Response, which is dated October 30, 2003. Claims 21-24, 26-36 and 69 stand rejected. Claims 26, 28, 30, 32 and 34 were canceled in applicants' previously filed Amendment and Response dated October 30, 2003. Claims 21 and 31 were amended in applicants' previously filed Amendment and Response dated October 30, 2003, but the amendments were not entered.

Rejection under 35 U.S.C. § 103

Claims 21-24, 26-36 and 69 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over European Patent Application Publication No. EP 0 974 357 A1 ("Caux"), in view of PCT International Publication No. WO 98/14573 ("Luster") and "Regulation of dendritic cell trafficking: a process that involves the participation of selective chemokines" ("Dieu-Nosjean").

In addition to the amendments and arguments that applicants made in their previously filed Amendment and Response, which is dated October 30, 2003, to the final Office Action, applicants submit the following evidence of nonobviousness.

Applicants submit concurrently herewith a Declaration by Alain P. Vicari, along with an Exhibit, Exhibit A.

Exhibit A directly compares MIP-3 $\alpha$  to MCP-4 in the production of an antigen specific humoral immune response. In this experiment, groups of seven mice were injected in the right hind footpad with either 100 ng of recombinant human MIP-3 $\alpha$  protein (hMIP-3 $\alpha$ ) or 100 ng of recombinant human MCP-4 protein (hMCP-4) in 50  $\mu$ l of PBS. After three hours, the mice were injected at the same site with either 50  $\mu$ g of a control plasmid (pCDNA3) or 50  $\mu$ g of pCDNA3 plasmid encoding for  $\beta$ -galactosidase under the CMV

promoter (pLacZ). Serum was collected both one day before the first immunization and at day 28 after four weekly immunizations. The levels of  $\beta$ -galactosidase specific immunoglobulins in serum were measured using ELISA.

Exhibit A of the Vicari Declaration clearly demonstrates that hMCP-4 injection increases the antigen specific humoral response following DNA immunization, whereas hMIP-3 $\alpha$  injection does not. In fact, hMIP-3 $\alpha$  does not exhibit any increased effect over the control plasmid pLacZ. As stated in the Vicari Declaration, such a result would not have been expected.


Accordingly, applicants submit that the pending claims are not obvious in view of Caux, Luster and Dieu-Nosjean. Accordingly, withdrawal of the rejection of claims 21-24, 26-36 and 69 under 35 U.S.C. § 103(a) is respectfully requested.

#### CONCLUSION

Applicants submit that the claims are novel and not obvious in view of the cited references. Accordingly, reconsideration of the rejections and allowance of the claims at an early date are earnestly solicited.

If the undersigned can be of assistance in addressing issues to advance the application to allowance, please contact the undersigned at the number set forth below.

Respectfully submitted,



Michael G. Biro  
Reg. No. 46,556

Schering-Plough Corporation  
Patent Department  
Mail Stop K-6-1, 1990  
2000 Galloping Hill Road  
Kenilworth, NJ 07033-0530  
Phone: (908) 298-5098  
Fax: (908) 298-5388